

# UNITED STATES DEPARTMENT OF COMMERCE **Patent and Trademark Office**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR			ATTORNEY DOCKET NO.	
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Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

Application No.

Applicant(s)

08/952,996

Leijon et al.

Office Action Summary Examiner

Enad, Elvin

Group Art Unit 2834



ΧF	Responsive to communication(s) filed on Sep 27, 1999	·				
X -	This action is <b>FINAL</b> .					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.G. 213.					
is lo appl	nortened statutory period for response to this action is set to enger, from the mailing date of this communication. Failure to ication to become abandoned. (35 U.S.C. § 133). Extensions CFR 1.136(a).	respond within the period for response will cause the				
Disp	osition of Claims					
>	Claim(s) 1-29 and 31-44	is/are pending in the application.				
	Of the above, claim(s)	is/are withdrawn from consideration.				
	Claim(s)					
)	Claim(s) 1-29 and 31-44					
	Claim(s)					
	Claims					
Ann	lication Papers					
,	See the attached Notice of Draftsperson's Patent Drawing R	eview, PTO-948.				
	The drawing(s) filed on is/are objected	to by the Examiner.				
	The proposed drawing correction, filed on					
	The specification is objected to by the Examiner.					
	The oath or declaration is objected to by the Examiner.					
Prio	rity under 35 U.S.C. § 119					
	Acknowledgement is made of a claim for foreign priority und	der 35 U.S.C. § 119(a)-(d).				
	All Some* None of the CERTIFIED copies of the	e priority documents have been				
	received.					
	received in Application No. (Series Code/Serial Number	or)				
	received in this national stage application from the Int	ernational Bureau (PCT Rule 17.2(a)).				
	*Certified copies not received:					
	Acknowledgement is made of a claim for domestic priority u	nder 35 U.S.C. § 119(e).				
Atta	chment(s)					
	Notice of References Cited, PTO-892					
>	Information Disclosure Statement(s), PTO-1449, Paper No(s	11				
	Interview Summary, PTO-413					
	Notice of Draftsperson's Patent Drawing Review, PTO-948					
	Notice of Informal Patent Application, PTO-152					

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-9,11 and 15-44 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant Disclosed Prior Art Figure 3 in view of Elton et al. (USP 5,036,165).

Prior art figure 3 discloses the claimed invention except for having a winding comprising of an insulation system and at least two semiconducting layers, the layers having substantially the same coefficient of thermal expansion.

Elton et al. teach that it is known to have an electrical cable comprising an internal grading layer of semi-conducting pyrolyzed glass fiber layer in electrical contact with the cable conductor. In another form of embodiment, Elton et al. teach an electrical cable provided with an exterior layer of internal grading layer of semi-conducting pyrolyzed glass fiber layer in contact with an exterior cable insulator with a predetermined reference potential.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the cable assembly of Elton et al. to the device as disclosed in prior art figure 3 since such a modification according to Elton et al. would provide a conductor which prohibits the development of corona discharge.

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3. In regard to forming the semiconducting layer with the same coefficient of thermal expansion as that of the insulation layer, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have formed these layers with similar coefficients since it was known in the art that the expansion rate of the two layers would be the same and this is desirable in order to prevent cracking of the insulation and wear between the two.

4. Claim 10 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant Disclose prior art Figure 3 in view of Elton et al. (USP 5.036.165) and further in view of Takaoka et al. (USP 5.094.703).

Prior art figure 3 and Elton et al. disclose the claimed invention except for a teaching of having strands of the electrical conductor comprised of insulated and uninsulated windings.

Takaoka et al., as seen in figures 7,8,10 and 11 teach having a stranded conductor for an electrical cable comprising a combination of uninsulated stranded conductor and an insulated stranded conductor.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the teaching of Takaoka et al. having insulated and uninsulated electrical conductor strands and to have modified the device of Elton et al. since such a modification would reduce the amount of insulation needed minimizing assembly and production costs.

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5. Claim 12 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant Disclose prior art Figure 3 in view of Elton et al. (USP 5,036,165) and further in view of Breitenbach et al. (USP 4,785,138).

Prior art figure 3 and Elton et al. disclose the claimed invention except for a teaching of having metal screen and sheath in the cable.

Breitenbach et al. teach that it is known to utilize metal screen and sheath in the cable. It would have been obvious to one having ordinary skill in the art at the time the invention was made to used the arrangement of Breitenbach et al. to the device of as disclosed by Elton et al. since such a modification according to Breitenbach et al. in column 4. lines 59-69 would provide mechanical protection and electrical shield for the cable.

6. Claims 13 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant Disclose prior art Figure 3 in view of Elton et al. (USP 5,036,165) and further in view Lauw (USP 4,982,147).

Prior art figure 3 and Elton et al. disclose the claimed invention except for a teaching of having or not having a step-up transformer in the system device.

Lauw in column 6, lines 50-52 teach that use of transformers to step-up or step down the voltage are contingent upon the requirement of the application. In this instant application, having a voltage higher than 30kV-36kV, it would have been an obvious matter of design choice to one having ordinary skill in the art to utilize a step-up transformer in order to increase and meet the required voltage in the application.

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## Response to Arguments

7. Applicant's arguments filed on September 27, 1999, have been fully considered but they are not persuasive. In response to applicant's arguments that Elton fails to suggest or teach the use of his cable in a dynamo-electric machine, applicant's attention is directed to the abstract whereby Elton suggests that his insulated conductor may be used in windings of dynamoelectric machine.

In response to applicant's arguments that Elton does not provide a solid insulating system, note that element **106** in figure 1 is an insulation. Moreover, this arrangement is also known and taught by Breitenbach et al. (USP 4,785,138).

#### Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for response to this final action is set to expire THREE MONTHS from the date of this action. In the event a first response is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than SIX MONTHS from the date of this final action.

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- 9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elvin Enad whose telephone number is (703) 308-7619. The examiner can normally be reached on Monday-Friday from 8:00AM to 4:00PM.
- 10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez, can be reached on (703) 308-1371. The fax phone number for this Tech Center is (703) 305-3431(32).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Elvin Enad Primary Examiner Art Unit 2834 11.02.99